



1 **EC TYPE EXAMINATION CERTIFICATE**

2 Equipment or protective system intended for use in potentially explosive atmospheres –  
Directive 94/9/EC – Annex III

3 EC Type Examination **TRAC14ATEX0050X**  
Certificate No.:

4 Equipment: **Sulfur Recovery Analyzer 888**

5 Manufacturer: **AMETEK Process Instruments,**

6 Address: **455 Corporate Boulevard, Newark, DE 19702, USA**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 TRaC Global Ltd, Notified Body number 0891 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential report **TRA-022311-33-00A**.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in section 18 of the schedule to this certificate, has been assured by compliance with:

**EN 60079-0:2012**

**EN 60079-2:2014**

10 If the sign “X” is placed after the certificate number then this indicates that the equipment or protective system is subject to special conditions of safe use specified in the schedule to this certificate.

11 This EC-Type Examination certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of this equipment or protective system shall include the following:

 **II 2 G Ex d pxb IIC T3 Gb**

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the TRaC Ex Certification Scheme.

*S.P. Winsor*

S P Winsor, Certification Manager

Issue date: 2015-10-07

Copy No.: 1e

Page 1 of 5

Form RF355 is16A

**NORTH WEST**

Unit 1, Pendle Place, Skelmersdale, West Lancashire, WN8 9PN UK.

T +44 (0)1695 556666 F +44 (0)1695 557077 E test@tracglobal.com

www.tracglobal.com

13 **SCHEDULE TO EC TYPE EXAMINATION CERTIFICATE**

14 **TRAC14ATEX0050X**

15 **General description of equipment or protective system included within the scope of this certificate**

The 888 is a photometric sulfur gas analyzer. Specifically it monitors the level of hydrogen sulfide and sulfur dioxide gas in a customer process stream. The customer uses this information to balance the ratio of hydrogen sulfide to sulfur dioxide and efficiently recover the sulfur via a chemical reaction.

The 888 is designed to be directly fastened to the customer process pipe. A sample of the customer process gas is drawn through it (via a probe) and then returned to the process pipe. A Xenon flash lamp is used to illuminate the sample of the process gas. Four photodiodes and four band pass optical filters are used to measure the intensity of the light. The light intensity is used to calculate the gas concentrations. The 888 maintains the sample at a temperature of 150°C to prevent any elemental sulfur present from condensing onto the optical surfaces. There is also an optional provision to clean the 888 using steam to prevent the build-up of any contamination.

The 888 is rated 120VAC, 50-60Hz, 500W OR 240VAC, 50-60Hz, 500W (dependent upon Configuration) and has been designed for permanent Outdoor use in Zone 1 locations with ambient temperatures within the range of -20°C to 60°C.

***A list of controlled Manufacturer's Documents is given in Appendix A to this schedule.***

16 **Test report No.:**                **TRA-022311-33-00A.**

17 **“Special Conditions of Safe Use” for Ex Equipment, if any:**

1. The installer must install a second pressure regulator on the input of the unit to mitigate any risk from a single regulator failure in the system.
2. The Customer Connection Enclosure of the 888 must be terminated in accordance with country and local electrical codes.
3. The installer must install appropriate protection from light to ensure that the resistance to light of the 888, or parts of the 888 is satisfactory.
4. The installer must ensure that the installation minimizes the risk from Electrostatic Discharge.

18 **Essential health and safety requirements**

Covered by application of the standards listed in section 9 of this certificate and the assessment conducted in the test report listed in section 16 of this certificate

19 **Additional information**

**“Routine tests”, if any:**

1. A functional verification for correct operation of the Ex certified purging system (Pepperl + Fuchs, Model 6000-DV-S2-XD-AC) and Ex certified enclosure relief vent with flow and pressure monitoring (Pepperl + Fuchs, Model EPV-6000-AA-01) shall be carried out.
2. Routine leakage tests shall be carried out on the pressurized enclosure in accordance with EN 60079-2, Clause 17.2.

**“Special conditions for manufacture”, if any:**

None.

**Other information, if any:**

None.

Photographs



Details of markings



Details of variations to this certificate

- None

## CONTINUATION OF SCHEDULE TO CERTIFICATE TRAC14ATEX0050X

### Notes to CE marking

In respect of CE Marking, TRaC Global Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

### Notes to this certificate

TRaC certification reference: **TRA-022311-32-00**.

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.



CONTINUATION OF SCHEDULE TO CERTIFICATE TRAC14ATEX0050X

**APPENDIX A - LIST OF CONTROLLED MANUFACTURER'S DOCUMENTS**

Title:	Drawing No.:	Rev. Level:	Date:
PRESSURE TRANSDUCER PCB ASSEMBLY	403464901	B	2015-06-01
PRESURE TRANSDUCER ASSEMBLY, ASPIRATOR	403464903	A	2015-06-01
ASSEMBLY, ENCLOSURE, OVEN	883007901	D	2015-05-08
ASS'Y, ENCLOSURE, ELECTRONICS (2 pages)	883006901	F	2014-11-13
ASSEMBLY, MANIFOLD BLOCK (2 pages)	883009901	F	2015-05-21
ASS'Y, ELECTRONICS MOUNTING PANEL (5 pages)	883012901	F	2015-01-09
ASSEMBLY, ELECTRONICS DETAIL	883018901	C	2015-06-01
ASSEMBLY, POPULATED ELECTRONICS	883021901	E	2014-12-15
ASS'Y, DEMISTER WITH CONNECORS	883026901	E	2015-06-10
ASSY, BASE ANALYZER (5 pages)	883027901	K	2015-08-17
ASSY, STANDARD CELL	883030906	C	2015-06-01
ASSEMBLY, 888 IECX, X-PURGE W/DISCONNECTS (6 pages)	883030914	D	2015-08-17
WIRING DIAGRAM, ZONE 1 (8 pages)	883031902	H	2015-09-08
888 CERTIFICATION DRAWING (9 pages)	883033901	B	2015-06-04
ASSEMBLY, PCB, MODEL 888 SIGNAL DISCONNECT(2 pages)	883110901	A	2014-10-07
ASSEMBLY, PCB MODEL 888 RELAY DISCONNECT(2 pages)	883111901	A	2014-10-08
Model 888-ATEX Tail Gas Analyzer - Essential Health & Safety Requirements	883052901	A	-
Model 888 Tail Gas Manual (166 pages)	883056901	A	-
Model 888 Checklist (23 pages)	883115001	B	2015-06-25
Line Filter, Vented	883114001	A	2015-01-07
Model 888 Tech File F-0070 (31 pages)	F-0070	6	2015-09-24
LABEL, ATEX/IECEX 888	883109001	E	2015-10-06
LABEL, Model PN/SN/Volt/Manu.Year	000137001	C	2015-05-13
LABEL, Do Not Open While Energized	883109008	A	2015-02-20
LABEL, Do not open	883109006	B	2015-07-10
LABEL, This Enclosure Contains	883109005	A	2015-02-20
LABEL, Pressurized Enclosure	883109007	A	2015-02-20
LABEL, ESD Hazard	883118001	A	2015-06-01
LABEL, Batteries Inside	883109012	A	2015-02-23
Decal, 888 X-Purge Start Up Label	883030913	B	2015-04-06
LABEL, Battery HOLDER, HOST DISPLAY	883109011	B	2015-09-24
RTD	883058001	B	2014-02-04
ASSEMBLY, Battery Enclosure, Host Display	883014908	A	2015-02-23
Enclosure, Battery Protector, Host Display	883040006	A	2015-02-20

- information not available